



NATIONAL ASSOCIATION OF STATE BOATING LAW ADMINISTRATORS

National Boating Education Standards

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***In Memorial of V/C Carl Mahnken
U.S. Power Squadron and Key Member of the
Boating Education Standards Advisory Board***



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Table of Contents

| | |
|---|----|
| Table of Contents..... | 1 |
| Disclaimer | 5 |
| The National Association of State Boating Law Administrators | 6 |
| Preamble | 7 |
| The National Boating Education Standards..... | 10 |
| The Boat..... | 10 |
| Standard 1.1 - Boat Capacities..... | 10 |
| Standard 1.2 - Boat Registration Requirements..... | 10 |
| Boating Equipment | 10 |
| Standard 2.1 - Personal Flotation Device Types and Carriage | 10 |
| Standard 2.2 – Personal Flotation Device Sizing and Availability | 11 |
| Standard 2.3 – Wearing Personal Flotation Devices | 11 |
| Standard 2.4 - Personal Flotation Device Serviceability | 11 |
| Standard 2.5 - Fire Extinguishers | 11 |
| Standard 2.6 - Back-Fire Flame Control Device | 12 |
| Standard 2.7 – Ventilation Systems..... | 12 |
| Standard 2.8 – Navigation Light Equipment | 12 |
| Standard 2.9 - Sound Signaling Equipment..... | 12 |
| Trip Planning and Preparation | 13 |
| Standard 3.1 - Checking Local Weather And Water Conditions..... | 13 |
| Standard 3.2 - Checking Local Hazards | 13 |
| Standard 3.3 - Filing a Float Plan | 13 |
| Standard 3.4 - Boat Preventative Maintenance..... | 13 |
| Standard 3.5 – Transporting and Trailering..... | 14 |
| Standard 3.6 - Fueling Procedures..... | 14 |
| Standard 3.7 - Pre-Departure Checklist & Passenger Communication | 14 |
| Marine Environment..... | 14 |
| Standard 4.1 – Environmental Laws and Regulations..... | 14 |
| Standard 4.2 - Human Waste Disposal | 15 |
| Standard 4.3 – Disposal of Toxic Substances..... | 15 |
| Safe Boat Operation..... | 15 |
| Standard 5.1 - Operator Responsibilities | 15 |
| Standard 5.2 - Influence of Drugs and Alcohol on Boat Operation | 16 |
| Standard 5.3 - Navigation Rules of the Road | 16 |
| Standard 5.4 - Aids to Navigation | 17 |
| Standard 5.5 - Docking and Mooring | 17 |
| Standard 5.6 - Anchoring..... | 17 |
| Emergency Preparedness | 18 |
| Standard 6.1 - Rendering Assistance | 18 |
| Standard 6.2 - Capsizing Emergencies | 18 |
| Standard 6.3 - Falls Overboard Emergencies | 18 |
| Standard 6.4 - Hypothermia Prevention | 18 |
| Standard 6.5 - Fire Emergency Preparedness | 18 |
| Standard 6.6 - Running Aground Prevention and Response | 19 |
| Standard 6.7 - Accident Reports | 19 |
| Standard 6.8 - Boating Accident Report Form | 19 |
| Other Water Activities..... | 19 |
| Standard 7.1 – Personal Watercraft and other Jet Propelled Watercraft | 20 |
| Standard 7.2 - Water Skiing..... | 21 |

| | |
|---|----|
| Standard 7.3 - Diving and Snorkeling | 21 |
| Standard 7.4 - Hunting & Fishing..... | 21 |
| Boating Education Practices | 22 |
| Standard 8.1 - Continuing Education..... | 22 |
| Standard 8.2 - State Specific Boating Information | 22 |
| Course Format and Testing Requirements..... | 21 |
| Standard 9.1 - Boat Operator Knowledge Course Formats | 21 |
| Standard 9.2 - Boat Operator Knowledge Exams | 21 |
| Recommended Boating Safety Information..... | 22 |
| R1 – Boat Types and Uses | 22 |
| R2 - Boating Terms..... | 22 |
| R3 - Boat Theft Prevention | 22 |
| R4 - Communication Procedures | 22 |
| References Consulted | 24 |

Disclaimer

NASBLA and affiliated organizations do not undertake to verify the continuous adherence by courses or instructors to every applicable standard or guideline. Nor does the National Association of State Boating Law Administrators warrant, guarantee, or insure that compliance with these standards will prevent any or all injury or loss that may be caused by or associated with any person's use of boats, facilities, equipment, or other items or activities that are the subjects of these standards; nor does the National Association of State Boating Law Administrators assume any responsibility or liability for any such injury or loss.

Further, the National Association of State Boating Law Administrators hereby expressly disclaims any responsibility, liability or duty to affiliated courses, organizations, instructors, boaters or their families, for any such liability arising out of injury or loss to any person by the failure of such organizations, courses, or instructors to adhere to these standards.

Adapted from: American Camping Association. (1998). Accreditation Standards for Camp Programs and Services. American Camping Association: Martinsville, IN.

The National Association of State Boating Law Administrators

Since its inception, the National Association of State Boating Law Administrators, Inc. has functioned effectively as the voice of the states and territories regarding state boating law enforcement and boating safety. Today, NASBLA coordinates approval of state and private boating education programs, promotes uniform boating regulations through the adoption of model acts and policies, develops methods to improve the nation's boating accident database, fosters cooperation between the U.S. Coast Guard and the states, and strives for the general advancement of boating safety. Since the implementation of the state assistance program, the U.S. Coast Guard has relied on NASBLA to assist in the efficient and effective management of the federal funds.

Membership in the association consists of state officials responsible for administering and/or enforcing state boating laws. "State" means a state of the United States, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, Northern Mariana Islands and the District of Columbia. Officers of the association consist of a President, Vice-President, Secretary-Treasurer, and an executive board composed of the officers, two other members-at-large, the immediate Past President, and the Presidents of the three regional boating administrators associations. The Board is augmented with an Executive Director and an Executive Secretary. Officers are elected annually and take office on the first day following the conference at which they were elected, and hold office until the last day of the conference at which their successors are chosen.

The association is recognized for its stewardship of recreational boating safety. For more than 35 years, NASBLA has worked closely with the U.S. Coast Guard, the States and others to insure that the intent of the congress to promote uniformity, reciprocity and comity among the various states was given priority. Testimony of this is the many resolutions and model acts that have been generated by the association. In doing this NASBLA brings to the table, highly qualified personnel in the fields of boating law enforcement, education, boating safety and on-the-water search and rescue.

Preamble

The purpose of these standards is to educate boating education professionals regarding the practices and procedures followed generally within the boating education community. That purpose is furthered to the extent that the standards provide a basis for accreditation of boating education courses by the National Association of State Boating Law Administrators (NASBLA). It is not the intention of The National Association of State Boating Law Administrators to attempt to include every practice or procedure that might be desirable or implemented within a boating education course since the conditions, facilities, and goals of all courses are not identical or uniform.

The accreditation programs of the National Association of State Boating Law Administrators are designed to be applied only to those boating education courses that are consistent with the stated definitions and eligibility requirements. Courses outside of these definitions or criteria are not subject to our standards and are not considered for accreditation.

Standards Development - NASBLA developed its minimum content for boating education courses over a decade ago. These standards have served as a guide for state, non-profit and commercial providers to follow in developing boating education materials. In July of 1998, NASBLA contracted with a research team anchored at the Pennsylvania State University to evaluate the existing guidelines and develop a new minimum “standard of care” for boating education. This new set of standards is intended to prescribe the minimum body of knowledge necessary to effect safe, legal, and enjoyable boating. In addition, the proposed standard of care is predicated on reducing risk in recreational boating based on empirical accident and boating violation statistics.

Relevant documents listed in the reference section of this document were reviewed and interviews were conducted with nationally prominent and recognized boating educators. A working draft of the standards was written and submitted to the Standards Advisory Committee for review and comment. Several more drafts of the standards were completed, each going through a revision process. In December of 1998, the Penn State team met with the Standards Advisory Committee for two days of review and comment. The result of that meeting was a draft set of standards to be validated and pilot tested in the second phase of the study.

Phase 2 involved three separate tasks carried out between January and August, 1999. . Task 1 solicited the input of almost 150 boating educators representing major national boating organizations. This survey asked boating experts whether or not each proposed standard should be included as a minimum boating education standard, as well as the relative importance of each standard. Task 2 involved a review of nine boating education course/texts using the draft standards. This task used volunteers who evaluated their own course materials against the standards, along with independent reviews by the research team and NASBLA representatives. The purpose of Task 2 was to simulate the NASBLA function of reviewing boating courses submitted to NASBLA for compliance with each of the National Boating Education Standards. Task 3 of the evaluation sought to understand how instructors, presented with the draft standards, dealt with the design, implementation, and teaching of a boating safety course using these standards. In this task the purpose was to gain a deeper understanding of the standards through intensive observations and discussions with boating educators using the standards. Each of the three tasks was structured to gain information that would be useful in revising the standards.

Briefly, the results of these three tasks showed a strong consensus among boating educators that the draft standards represent the minimum information that should be taught in an eight hour boating

safety course. The evaluation uncovered several standards that should be moved from the recommended section to the required section. Also, there were many wording changes that increased the clarity of the standard or illuminated aspects of the standard not emphasized in the previous draft. The information gathered in this evaluation is extensive and is summarized in a separate detailed

report submitted to NASBLA. The final step in the standards development process was another full day meeting with the Standards Advisory Committee to review the phase 2 findings and resulting standards. The current document presents the final standards, as approved by the Standards Advisory Board, approved by the Education Committee and overall membership of NASBLA on September 22, 1999.

Intended Audience - These standards were developed for use by boating education course instructors, boating education text authors, and other boating education professionals who intend to submit course materials for NASBLA review and accreditation. It is anticipated that materials submitted for NASBLA course accreditation based on these standards will require less revisions than similar materials submitted in the past. It is hoped that this document will clearly communicate with prospective authors what must be included to provide a minimum standard of care, resulting in a more efficient course review process.

Applicability and Definitions - These standards apply to courses for operators of recreational motorized boats and sailboats. It is recognized that there are different types of boating courses with different target audiences. These standards identify the core topics that must be covered in most courses, and this single set of standards replaces NASBLA's previous separate standards for general boating courses and PWC courses.

The standards use the term, "course," to refer to all components of a boating education course, including instruction, texts, supplemental materials, and tests. A boating course may be presented in various formats, including classroom instruction, home study, video, distance learning, CD-ROM, or any combination of these formats. "Boat" is used to refer to all types of recreational watercraft. It is expected that any unique words or terminology used in courses submitted will be clearly defined in the course materials.

MINIMUM Standards - These standards were intended to convey to organizations and individuals the **minimum body of knowledge that must be included in a short, 6-8 hour, boating education course**. Instructors, text authors, boating professionals, and organizations are encouraged to go beyond the standards when in their judgment and experience it assists the boat operator to boat more safely. In addition, the standards are intended to show just the minimum content of the course materials, not the sequence or organization of the material. Although the standards are organized in a particular way, course/text developers are welcome to organize their information as they prefer.

Required Materials for NASBLA Review - It is assumed that the standards will be met in various ways and that materials submitted to NASBLA may include course texts, supplemental texts, instructor guidelines or outlines, and handout materials. State-specific and localized information that is relevant to the particular course audience may be provided through any of these media (see standard 8.2 for the required content of this material). To assist in the determination of whether the standards are met, the learning objectives and exams must be included in the package of materials submitted to NASBLA for review.

Accuracy Requirement – It is mandatory that all information contained in course materials receiving NASBLA accreditation be factually correct.

Standards Revision - At this point in time procedures for the revision of the National Boating Education Standards are being developed. It is expected that any new proposed standards or revisions to the standards will be subject to the same rigorous review that the present standards have undergone.

The National Boating Education Standards

NASBLA accredited boating education courses and texts will address at least the following minimum standards.

The Boat

Standard 1.1 - Boat Capacities

The course will describe how to determine acceptable loading based on locating and determining a boat's gross load capacity (total weight and # persons) from the boat capacity plate and horsepower recommendations.

Rationale - A boat operator must be able to avoid capsizing situations by adhering to boat capacity limits and properly distributing the weight in the boat for safe operation. Coast Guard accident statistics indicate that capsizing was the leading cause of boater fatalities in the last five years. Many capsizing incidents have resulted from overloaded boats.

Standard 1.2 - Boat Registration Requirements

The course will describe:

1. that all motorized boats and many other boats are required to be registered (check state requirements),
2. requirements for hull identification number,
3. the required certificate of number (registration documentation), and external display of numbers,
4. the requirements for federally documented vessels,
5. reciprocity regulations, and
6. registration requirements in the boat's state of principal use.

Rationale - In a recent survey of state boating law administrators (NASBLA 1998), 20% of boating citations were due to improper display of vessel registration numbers. Understanding the legal requirements for boat registration will help boaters to avoid unnecessary violations and resulting fines.

Boating Equipment

Standard 2.1 - Personal Flotation Device Types and Carriage

The course will describe the types of Coast Guard approved personal flotation devices (PFDs) and their respective uses, advantages, and disadvantages. The course will also describe the number and types of PFDs that must be carried on the boat according to applicable regulations.

Rationale - U. S. Coast Guard statistics consistently show that at least 85% of the people who died in boating accidents were not wearing PFDs. Nationally, carrying improper PFDs for the number and types of passengers on board is the second highest category of citations issued to

boaters. Special attention must be given to the use of hybrid Type 5 inflatable PFDs and special restrictions for totally inflatable PFDs.

Standard 2.2 – Personal Flotation Device Sizing and Availability

The course will communicate that PFDs must be readily accessible and correctly sized for the persons using them.

Rationale - Capsizing and falls overboard accounted for 488 fatalities in 1997 – nearly 60% of all boating fatalities. Proper use of PFDs is essential for boater safety. The participant needs to understand how to adjust PFDs of various types and styles for themselves and other passengers.

Standard 2.3 – Wearing Personal Flotation Devices

The course must inform boat operators of the advisability of wearing PFDs at all times. The course must emphasize the need for boat operators to be alert to changing boating conditions and to inform all persons on board they should be wearing PFDs in dangerous conditions such as high boat traffic, severe weather, dangerous water conditions, dangerous local hazards, distance from shore, operation at night, boating alone, etc. The course will address the difficulty of putting PFDs on in the water.

Rationale - Nine out of 10 drowning victims in 1997 were not wearing lifejackets. It is essential that boater safety education repeatedly emphasize the importance of wearing PFDs, along with constant vigilance and attention to changing conditions and adapting behavior to those conditions. Hazardous waters and weather are major causes of deaths in boating accidents. In 1997 these two factors caused nine percent of reported boating accidents but accounted for 21% of all boating fatalities.

Standard 2.4 - Personal Flotation Device Serviceability

The course will describe the characteristics of serviceable (good) PFDs and when to replace PFDs due to excessive wear or damage. Special attention must be given to the maintenance of inflatable PFDs as per manufacturer recommendations.

Rationale - PFDs are often subjected to rough handling, ultra violet sunlight, and improper storage. These conditions reduce the ability of the PFD to perform its intended function. The operator should be able to distinguish serviceable PFDs and identify the key conditions that necessitate replacing the PFD. Regular maintenance checks are essential to ensure the proper functioning of all PFDs and especially the inflatable PFD.

Standard 2.5 - Fire Extinguishers

The course will describe the legal requirements for fire extinguishers on recreational boats, the kind of fire extinguishers needed for different types of fires, the importance of placing fire extinguishers in a readily accessible location, and the need for regular inspection of fire extinguishers.

Rationale - U.S. Coast Guard requirements specify the number and types of fire extinguishers that must be carried for class “B” fires on boats of various sizes. Boat operators must be able to respond quickly in the event of fire. Anticipating the emergency by outfitting the vessel with the appropriate equipment and understanding how to use it reduces exposure to danger.

Standard 2.6 - Back-Fire Flame Control Device

The course will describe the purpose and maintenance of a back-fire flame control device (a required device on all enclosed engines with a carburetor).

Rationale - The U. S. Coast Guard requires that boats with gasoline engines be equipped with an acceptable means of backfire flame control.

Standard 2.7 – Ventilation Systems

The course will discuss the ventilation system requirements for different types of boats.

Rationale – The U. S. Coast Guard requires that all recreational boats which “use gasoline engines for electrical generation, mechanical power or propulsion” must be equipped with a ventilation system. Gasoline vapors can collect in the bilge and explode. “Boat owners are responsible for keeping their boats’ ventilation in operating condition.”

Standard 2.8 – Navigation Light Equipment

The course will cover the navigation light requirements for recreational boats from applicable sections of Navigation Rules (Part C) as summarized in Federal Requirements and Safety Tips for Recreational Boats. (Also see standard 5.3.7)

Rationale – Recreational boats are required to display navigation lights between sunset and sunrise and during periods of reduced visibility. Boating accident statistics indicate that nighttime collisions account for a significant proportion of total boat collisions. Boat operators who know and follow navigation and anchorage light requirements can help reduce nighttime collisions. Many of the navigation rules are devoted to navigation lights. The Coast Guard pamphlet, Federal Requirements and Safety Tips for Recreational Boats, provides a summary of the most relevant lighting requirements for recreational boaters.

Standard 2.9 - Sound Signaling Equipment

The course will describe the types and use of sound producing devices required on recreational boats. (Also see standard 5.3.6)

Rationale – Sound devices are required equipment on recreational boats. In certain boating conditions, boat operators must be able to alert other boats to their presence or operation intentions. The number one type of reported boating accident is “collision with another vessel,” underscoring the importance of carrying the appropriate sound warning equipment on board.

Also see Standard 5.3.10 – Visual Distress Signals

Trip Planning and Preparation

Standard 3.1 - Checking Local Weather And Water Conditions

The course will describe how to make informed boating decisions based on forecasted local weather and water conditions. It will also describe dangerous weather conditions such as strong wind, storms, lightning, hurricanes, fog, and their importance in trip planning.

Rationale - Capsizing continues to be reported as one of the leading or contributing causes of boater fatalities. Boat operators must be able to use weather information to make judgments about probable water conditions and decisions about whether to continue with the float plan. Often poor weather in combination with other unexpected emergencies accelerates the danger to boat operators and their passengers.

Standard 3.2 - Checking Local Hazards

The course will describe how to obtain information about local hazards that may impede the operation of a recreational boat.

Rationale - Boating accidents continue to indicate that a lack of understanding of local conditions contributes to boating fatalities. Hazards requiring special attention include: low-head dams, rapids, sudden winds, tides, currents, white water, overhead cables, bridges, waves, and heavy boating traffic.

Standard 3.3 - Filing a Float Plan

The course will describe the importance of notifying someone of your boating plans and the basic information that should be included.

Rationale - In the event of an accident, rescue authorities can respond much faster and in a more focused way if a float plan has detailed information about the expected destination, boat description, course, time of departure, and time of expected return.

Standard 3.4 - Boat Preventive Maintenance

The course will communicate the need for regular inspection and maintenance of the boat and its key components (e.g., through-hull fittings, motor, electrical system, fuel system).

Rationale - Keeping a boat in good working order is as much a part of the boating experience as boating itself. Almost all elements of safety revolve around the fact that the boat has been maintained and all its parts and systems are able to perform as they were designed. Negligence in this area will eventually lead to an unsafe or disastrous experience. In the last few years, 27% of vessels in reported accidents involved boat equipment/maintenance related factors. In addition, 34% of boating citations issued were due to boat equipment-related violations.

Standard 3.5 – Transporting and Trailering

The course will describe procedures to prevent trailering accidents and resulting injury and property damage. The course will cover safe trailering procedures including: 1) safe towing preparation, 2) road handling factors when pulling a trailer, 3) launching a boat, and 4) retrieving a boat from the water.

Rationale – The majority of recreational boats in the U.S. are trailered to and from the water. A boat trailer is one part of the entire boating package, which includes boat, trailer, hitch, and towing vehicle. Neglecting the trailer's maintenance can result in damage to a boat, the towing vehicle, or both, as well as create a hazard for other boats and vehicles

Standard 3.6 - Fueling Procedures

The course will provide information on proper procedures for fueling, ventilation during fueling, and protection of the marine environment during fueling.

Rationale - Gasoline and gasoline vapors are extremely explosive. Ignition of spilled fuel or vapors continues to cause boating accidents, injuries, and fatalities. Following safe fueling procedures reduces the opportunity for gasoline explosions.

Standard 3.7 - Pre-Departure Checklist & Passenger Communication

The course must describe the importance of using a pre-departure checklist and conducting an onboard safety discussion with passengers. Passengers should be informed about the location of PFDs, fire extinguishers, flares, first-aid kit, discharge and management of waste procedures, anchoring procedures, emergency radio operation (if applicable), storm/rough weather procedures, line handling, emergency boat operation, and falls overboard procedure.

Rationale - The mental and physical rehearsal of procedures for various boating emergencies can reduce the time passengers, crew and operators are exposed to dangerous conditions and increase the efficiency of rescue operations. Boat operators should inform passengers of relevant safety information to prevent accidents, increase safety, and reduce response time in the event of an emergency.

Marine Environment

Standard 4.1 – Environmental Laws and Regulations

The course will describe the environmental laws and regulations concerning littering (e.g., garbage and plastic), waste management plans, and display of information placards (where applicable) and aquatic nuisance species.

Rationale - Boat operators should remember that water pollution ruins not only the aesthetic beauty of the area, but harms human life, marine life and damages boating equipment. The degree and amount of garbage adrift on our coastal waterways continues to increase. Plastic, which many species mistake as food, is a big threat to marine life. Birds are found entangled in plastic rings, fishing line, or nets. Various federal and state laws prohibit throwing, discharging or depositing any sort of refuse matter in the waters of the U.S. Other acts

require boats of various sizes to display placards and keep records of their refuse disposal. A person who violates any of the requirements is liable to civil penalties, fines, and imprisonment. Regional, state, and local laws may also have specific restrictions on refuse disposal.

The spread of aquatic nuisance species (ANS) by recreational boaters is an increasing concern across the country. Milfoil, zebra mussels, and other ANS are being increasingly regulated by states to prevent their spread, with specific regional, state and local laws.

Standard 4.2 - Human Waste Disposal

The course will describe the proper procedure for disposal of human waste from recreational boats and how to identify no discharge zones and pumpout station locations.

Rationale - It is illegal to discharge raw sewage from a vessel within territorial waters (within the three-mile limit), the Great Lakes, and navigable rivers. Recreational boats are not required to be equipped with a toilet. However, the Clean Water Act requires that, if a toilet is installed, it must be equipped with a Coast Guard approved and operable Marine Sanitation Device (MSD).

Standard 4.3 – Disposal of Toxic Substances

The course will describe procedures for the prevention of spills and improper disposal of toxic substances such as fuels, oils, and cleaning products into the marine environment and the associated fines for non-compliance.

Rationale – Oil residue tends to build up in the bilges of boats and can easily be discharged directly in the water. The federal Water Pollution Control Act prohibits the discharge of oil or hazardous substances into navigable waters. Powerboats must have the capacity to retain oily mixtures on board and to transfer them to an approved reception facility.

Safe Boat Operation

Standard 5.1 - Operator Responsibilities

The course will describe a boat operator's ultimate responsibility for safety and all activity aboard the boat. This responsibility extends to other water users and includes: controlling boat speed, obeying no wake/limited wake restrictions, refraining from careless, reckless, or negligent operations on the water, controlling boat noise, observing and operating in accordance with homeland security measures, and other general boater courtesy.

Rationale – Boaters need to respect the rights of other people who live, recreate, or work on the water. Approximately 80% of all reported boating accidents involve operator controllable factors. The most common types of such factors include operator inattention or carelessness, operator inexperience, excessive speed, and failure to maintain a proper lookout. According to the Nighttime Boating Accident & Fatality Study, operator error is to blame for the majority of nighttime boating accidents and fatalities.

Negligent operation of a recreational boat which endangers lives or property is illegal. Nationally, 32% of boating citations in recent years were due to improper boat handling (e.g., negligent operation, excessive speed, operating in restricted areas, no wake area violations, collisions, going too fast at night, etc.).

In light of new security measures brought about by the events of September 11, 2001, it is critical that all boaters be aware of and comply with new homeland security measures set forth by federal, state and local governments. These should include, but are not limited to, keeping a safe prescribed distance from military and commercial ships and avoiding commercial port operations areas, observing all security zones, following guidelines for appropriate conduct such as not stopping or anchoring beneath bridges or in a channel, and observing and reporting suspicious activity to proper authorities.

Standard 5.2 - Influence of Drugs and Alcohol on Boat Operation

The course will describe the effects of drinking alcohol or using drugs while boating, and the boating laws pertinent to operating a boat while under the influence.

Rationale – One-third of all boating fatalities are drug or alcohol related. It is illegal to operate a boat while under the influence of such substances. Further, according to the Nighttime Boating Accident & Fatality Study, alcohol was by far the leading contributing cause (53%) of nighttime boating accidents and fatalities.

Standard 5.3 - Navigation Rules of the Road

The course will describe safe boating operation and good seamanship, including at least the following navigation rules:

- 5.3.1 - Definitions relevant to understanding the navigation rules [Navigation Rule 3]
- 5.3.2 – Rule of responsibility (to act in a reasonable and prudent manner consistent with the ordinary practices of recreational boating) [Navigation Rule 2]
- 5.3.3 – Proper lookout [Navigation Rule 5]
- 5.3.4 – Safe speed [Navigation Rule 6]
- 5.3.5 – Collision avoidance rules [Navigation Rules 7, 8, 11-18]
- 5.3.6 – Operation within narrow channels [Navigation Rule 9]
- 5.3.7 – Sound signals [Navigation Rules 32-37]
- 5.3.8 – Navigation light display and recognition [Navigation Rules 20-25]
- 5.3.9 – Restricted visibility [Navigation Rule 19]
- 5.3.10 – Visual distress signals [Navigation Rules 36-37]
- 5.3.11 – Rendering Assistance [Chapter 23]

Rationale: - According to 1997 boating accident statistics, “collision with another vessel” was the most reported type of accident, resulting in 1,309 injuries, 80 fatalities, and 7.3 million dollars in property damage. “Excessive speed” and “no proper lookout” were the third and fourth most common factors in boating accidents involving operator controllable factors. The Navigation Rules were designed to reduce accidents by standardizing boat navigation. Various laws

require recreational boaters to operate according to established rules such as those mentioned above. More than two-thirds of boating accidents involving operator controllable factors are caused by violations of one or more of these navigation rules.

Standard 5.4 - Aids to Navigation

The course will describe the Federal U.S. Aids to Navigation (USATONS) and the Uniform State Waterway Marking System (USWMS). The course must provide information about regulatory/informational markers (identified by orange bands on the top and bottom of each buoy) used to advise of situations, dangers, or directions indicating shoals, swim areas, speed zones, etc.

Rationale - Citations are regularly issued due to failure to obey regulatory markers. In order to navigate safely from place to place on the water, boat operators must depend on road signs just as we do on land. Aids to navigation are the road signs of the water. There are two systems of marking the waterways in the United States – U.S. Aids to Navigation (USATONS) and the Uniform State Waterway Marking System (USWMS). USATONS is a system prescribing regulatory markers and aids to navigation that mark navigable waters of the United States. USWMS is a system that prescribes regulatory markers and aids to navigation for navigable state waters. The USWMS may also mark the non-navigable internal waters of a state.

Note: Effective July 20, 1998, the United States Coast Guard commenced a five-year phased-in merger of the Uniform State Waterway Marking System with the United States Aids to Navigation System. This merger eliminates distinctions between the two systems and will ultimately create safer, less confusing waterways.

Standard 5.5 - Docking and Mooring

The course will describe common practices for docking and mooring a boat relative to boat size, type of boat, location, weather, and current.

Rationale – Significant boat/property damage, accidents and injuries result from docking and mooring of boats in marinas and boat ramp areas, particularly in adverse weather conditions. Docking techniques vary depending on wind, current, location, degree of boat traffic in the harbor, type of boat, size of boat and skills/abilities of the boater and crew.

Standard 5.6 - Anchoring

The course will describe the selection of anchors, related ground tackle, and their use for different types of boats in various boating conditions. The course must describe procedures for anchoring, use of anchors as safety devices in emergency situations, and the hazards of stern anchoring.

Rationale – Anchoring skills and decisions of where to anchor can make the difference between a successful or unsuccessful boating experience. Significant property and environmental damage can occur when improperly anchored boats slip anchor and drift into reefs, boats, marinas, or run aground.

Emergency Preparedness

Standard 6.1 - Rendering Assistance

The course will explain that, according to the Navigation Rules, boat operators are required to render assistance to a boat in distress to the extent they are able. (Also see standard 5.3.11)

Rationale – In the event of an emergency, individuals in charge of a vessel are required to provide assistance so far as they can do so without serious danger to their own vessel or the individuals on board their vessel. Assistance from other boaters can reduce the loss of life, injury or property damage resulting from boating accidents.

Standard 6.2 - Capsizing Emergencies

The course will describe how to prevent and respond to capsizing emergencies. These responses will include at least the following: donning lifejackets, taking a head count, staying with the craft when appropriate, signaling for assistance, using improvised floating aids, and initiation of procedures to recover people in the water.

Rationale – Every year, capsizing emergencies are the leading cause of boating fatalities. More significantly, in nearly half of the capsizing emergencies there was at least one fatality. These statistics underscore the need for boater education courses to stress the proper response/action in a capsizing emergency.

Standard 6.3 - Falls Overboard Emergencies

The course will describe procedures for preventing and responding to falls-overboard, including the proper response of persons on board for retrieval of a person in the water.

Rationale – Falls overboard are the second leading cause of boating fatalities. In 1997, 30% of total boating fatalities (243 deaths) resulted from falls overboard situations. Overloading, passenger movement on smaller crafts, and standing up contribute to many of the falls overboard accidents.

Standard 6.4 - Hypothermia Prevention

The course will describe the conditions under which hypothermia is likely to occur as well as its signs, symptoms, and prevention.

Rationale – Boaters have a much greater risk of dying when involved in a cold water immersion accident. Boaters' risk of dying increases with colder water temperatures. Sportsmen who hunt or fish from boats in cold weather are at greater risk of fatalities from capsizing or falling overboard. Water temperature varies by season and location.

Standard 6.5 - Fire Emergency Preparedness

The course will describe procedures to prevent and respond to boating fires such as proper use of fire extinguishers and basic knowledge of fire suppression principles.

Rationale - The potential for catastrophic emergencies from fire requires that boat operators take measures to prevent and be prepared to deal quickly and efficiently with fires. A key to understanding fire suppression is to know that eliminating one of the fire's key ingredients, fuel, oxygen, or heat, can extinguish the fire.

Standard 6.6 - Running Aground Prevention and Response

The course will describe how to prevent and respond to running aground for recreational boats.

Rationale – In 1997, groundings accounted for 15 fatalities, 217 injuries, and \$1.3 million in property damage. Preventing running aground is an important boat operator competence. Following proper procedures in the event of a grounding can reduce or minimize fatalities, boat damage, submerged object damage, and responses by public and private entities for salvage operations.

Standard 6.7 - Accident Reports

The course will describe what kinds of boating accidents require an accident report as well as how, when, and where to file the report.

Rationale – Accident reports are legally required when the accident involves: 1) loss of life; or 2) personal injury requiring medical treatment beyond first aid; or 3) property damage in excess of \$500.00; or 4) complete loss of the boat. Proper filing of accident reports provides information that can be used to assist boating safety professionals to address the most serious concerns to boater safety.

Standard 6.8 - Boating Accident Report Form

The course will include a sample accident report form, which can be included in the textbook or as a separate handout.

Rationale – U.S. Coast Guard reports indicate that only 5 to 10 percent of non-fatal boating accidents are reported. Most accidents are not reported because of ignorance of the law and difficulty in enforcing the law. Every effort to assist boaters to report accidents may increase the rate of compliance in reporting accidents.

Other Water Activities

Standard 7.1 – Personal Watercraft and other Jet Propelled Watercraft

The course will state that a Personal Watercraft is defined as a boat and must observe all boating regulations. It must describe the unique characteristics of Personal Watercraft (PWC), including at least the following topics:

- 7.1.1 – Operational characteristics of PWCs , including steering, stopping and stability of PWC
- 7.1.2 – Off- throttle steering
- 7.1.3 – PWC load capacities as per manufacturer recommendations
- 7.1.4 – Re-boarding a PWC
- 7.1.5 – The purpose and use of a Lanyard/Cut (Shut) off switch
- 7.1.6 – The purpose and use of a fuel reserve tank
- 7.1.7 – Laws and regulations
- 7.1.8 – Accident prevention
- 7.1.9 – Noise control
- 7.1.10 – Hours of operation

Rationale - Recreational boaters share waterways with personal watercraft or may themselves be operators of personal watercraft. Understanding the handling characteristics of personal watercraft can help keep adequate navigational distances to limit collisions and fatalities. PWC sales are growing faster than any other type of recreational boat, accounting for 30% of all sales. Of the 4,555 injuries from boating accidents in 1997, 40% involved personal watercraft. In addition, 27 more fatalities were reported with the use of PWCs in 1997 than in 1996, for an all time high of 84 fatalities. For these reasons, special attention needs to be addressed to PWC accident prevention.

Each PWC model has its own unique characteristics. New operators must read their owner's manual to understand the characteristics of their particular PWC. Knowing how to effectively handle a PWC also takes practice. New operators should practice their skills with an experienced operator who can guide them on controlling the PWC and making safe boating decisions.

PWCs operate differently than other boats. Releasing the throttle completely eliminates the ability to steer the craft. This is an important operating characteristic that is difficult for novice operators to conceive, particularly in situations of potential collisions.

PWC are highly maneuverable. The jet drive propulsion system is extremely responsive to slight turns of the handlebars. The responsiveness in maneuvering encourages operators of PWCs to try unusual stunts. These actions can push the operators to attempt maneuvers that are dangerous and beyond the safe operation of the PWC.

Operators must be able to re-board the PWC in deep water after falling off. This is most easily done from the rear (stern) of the craft. This maneuver is more challenging when the operator is tired. The weight of the person re-boarding and the stability of the model PWC being used also affect the ease of re-boarding.

Many states and local areas have laws and regulations specific to PWC operation and safety, including laws that deal with the preservation of the environment. Operators must understand these regulations in order to boat safely and legally.

PWC have special operating concerns that relate to the type of accidents these craft are most commonly involved in. A review of these accidents and how they could be prevented should be provided. For example, a proper lookout must be maintained when turning (look all around and behind before turning). Many accidents involving PWCs are caused by operators who do not own the PWC.

Making excessive noise is one way to make PWC presence on the water unpopular. PWC operators should avoid operating continuously in one area and should stay a reasonable distance from home and cottage owners trying to relax and enjoy the waterfront.

PWCs are not equipped with lights and, according to manufacturer recommendations, are not intended for nighttime use. Many states and localities further limit the hours of operation of PWCs.

Standard 7.2 - Water Skiing

The course will describe procedures to follow when pulling water-skiers or operating in the vicinity of water-skiing or other activities using towed devices.

Rationale – The forces generated by water skiers and their possible trajectory in a fall necessitate that each boat maintain as much distance as possible with a minimum of a 200-foot wide “ski-corridor” (100 feet on either side of the boat). “Skier mishaps” constituted the fifth most common type of boating accident as measured by total boats involved (445 boats in 1997) and injuries were reported in all but one of these accidents.

Standard 7.3 - Diving and Snorkeling

The course will describe how to recognize a diver down flag and the legal requirements for operating a boat in the vicinity of snorkeling or scuba diving activities.

Rationale – Recreational boats can present a hazard to divers in the water. Federal and state navigation rules may require that diving flags be displayed during diving activities. Flags can help prevent injuries by informing boat operators to keep a respectful distance.

Standard 7.4 - Hunting & Fishing

The course will inform people who fish and hunt from boats that they are boaters and need to follow safe boating practices. Information must be provided about accident risks unique to this group of recreational boaters.

Rationale - Fishermen and hunters often don’t consider themselves boaters and thus pay little attention to learning and observing boating safety rules. In a recent survey, 50% of those who purchased boats say they bought them to go fishing. Approximately one-third of national boating fatalities occurred while people were fishing from a boat. Likewise, more hunters die each year from drowning and the effects of hypothermia than from gunshot wounds. Many water-based hunting and fishing accidents occur when a hunter reaches for a decoy, or the boat capsizes from an unbalanced load, or a person falls overboard while standing up.

Boating Education Practices

Standard 8.1 - Continuing Education

The course will outline the need for additional boating safety education and staying informed of changes in boating safety requirements.

Rationale – It is important for boat operators to understand that one of their responsibilities is to keep up-to-date with new developments in boating laws and safety information. State laws vary with regard to licensing, equipment requirements, accident reporting procedures, etc. Boating equipment and safety information available to boat operators is constantly changing and improving. Boat operators who stay abreast of these changes will be ready for new situations, thus improving their own boating enjoyment as well as the safety of all boating participants.

Standard 8.2 - State Specific Boating Information

The course will contain (as part of the text or a separate handout) state specific information in regard to boating laws/regulations and local boating conditions. The course will include the following topics as applicable:

- 8.2.1 - registration and titling requirements such as number of years registration decals are valid, expiration date of registration, decal placement.
- 8.2.2 - laws for required wearing of PFD's for children, certain types of boats, and for special boating activities such as personal watercraft, skiers and others being towed.
- 8.2.3 - additional equipment requirements such as anchor, lanyard, bailing devices, visual distress signals.
- 8.2.4 - mufflers and noise levels.
- 8.2.5 - requirements for waste discharge, no discharge zones, and litter laws.
- 8.2.6 - special requirements for mandatory education, licensing, rental operation, and proficiency test certifications.
- 8.2.7 - age/horsepower restrictions and adult supervision requirements for children.
- 8.2.8 - laws further defining careless, reckless, unsafe, and negligent operations such as becoming airborne and operating less than specified distances behind a water skier.
- 8.2.9 - boat speed limits and operation in zoned and restricted areas.
- 8.2.10 - laws on operating under the influence of drugs and alcohol such as implied consent and BAC levels.
- 8.2.11 - law enforcement officer authority and boater responsibility to comply.
- 8.2.12 - boat accident reporting requirements.
- 8.2.13 - a state approved boating accident report form.
- 8.2.14 - other laws or regulations as required by the state approving authority.

Rationale - Although course materials intended for national distribution do not need to include state specific information, it is assumed that sponsoring boating organizations have procedures in place to assure that instructors provide supplemental materials and instruction to meet the

intent of this requirement. For state courses, the relevant state specific information must be included in the course materials.

Course Format and Testing Requirements

Standard 9.1 – Boat Operator Knowledge Course Formats

The course submitted for NASBLA review may be in any format that meets the standards as long as it can be reviewed easily by NASBLA. These may include but are not limited to classroom instruction, distance learning, or self-study programs.

Rationale – After extensive review of the relevant educational research literature, the overwhelming body of research suggests that there are significant differences in knowledge acquisition between traditional classroom formats and distance learning or self-study programs. Distance learning is thought of here as a wide range of learning formats usually involving the use of technology that includes Internet courses, tele-conferencing, and interactive video. Self-study programs can be home study courses and are usually thought of as an individual taking the initiative to learn material at their own pace. Consultations with researchers in the field confirmed that boat operator knowledge could be learned in many ways.

Any well designed course format for learning boat operator knowledge that results in the individual acquiring the essential knowledge is appropriate to submit for NASBLA review.

Standard 9.2 – Boat Operator Knowledge Exams

In order to receive NASBLA approval, all exams, whether administered as part of a course of study or as independent exams, must be submitted for review.

9.2.1 – The exam must be well designed and comprehensive in covering NASBLA's standards for boat operator knowledge. Well designed comprehensive exams assess boat operator knowledge equally well as an independent exam or as an exam at the end of a course.

Rationale – Well-designed comprehensive exams, whether administered as part of a course of study or independently as a challenge test, are equal. Experts in educational testing recommend that once exam standards are established and an exam constructed, then that exam equally measures boat operator knowledge however it was obtained. A well designed exam has a variety of types of questions and covers the entire body of knowledge as outlined by the National Boating Education Standards. Certain standards carry more importance and should receive more attention within the exam. At first, NASBLA will use experienced boating educators to review exams to determine validity and will eventually consider adopting

additional review procedures that will increase the quality of boat operator knowledge exams nationwide.

9.2.2 – Each exam submitted for review must be accompanied with a plan that explains how the test administrator will seek to maintain exam integrity. The plan must address security issues commensurate with the purpose of the test and perceived opportunity to commit exam fraud.

Rationale – It is essential that test security be designed to be appropriate for the exam purpose and the context of the test. Exam security plans might address procedures such as: confirming the identity of the test taker, randomizing test items, using different versions of an exam, observing test takers during the exam, protecting the security of the test item answers, using distinctive, hard to duplicate certificates, maintaining test taker records, etc. Rather than mandate a single exam security procedure for all examinations regardless of format or context, reviewing exam security plans provides NASBLA with the opportunity to determine appropriate levels of security for varying levels of exam circumstances. Exam security can be thought of as an escalating series of procedures that respond in kind to potential threats to exam integrity. Experienced boating education experts that are asked to review exam security plans will determine these judgements.

Recommended Boating Safety Information

The following items contain recommended course content but are not considered part of the minimum standards for boater education courses.

R1 – Boat Types and Uses

The course should describe the common types of recreational boats, common hull designs, and their performance in various types of boating situations.

Rationale - Boat operators should understand the handling characteristics of various boat types so as to match the boat to the water and planned activity. Boat performance characteristics as determined by design features should be known to a boat operator and factored into their boating decisions.

R2 - Boating Terms

The course should describe commonly used boating terms in addition to those terms required to follow the Navigation Rules. (see also standard 5.3.1).

Rationale - Knowing common boating terms could save time and confusion in the event of an emergency by enabling boat operators to secure the situation efficiently and communicate clearly.

R3 - Boat Theft Prevention

The course should contain information that addresses actions the boat owner can take to deter or prevent boat theft.

Rationale - Statistics indicate that boat theft is increasing. Boat owners can deter theft and assist law enforcement authorities through their actions and observations.

R4 - Communication Procedures

The course should describe the protocol and use of VHF marine radios and other equipment for contacting the Coast Guard or other rescue personnel in the event of a boating emergency.

Rationale - In the event of an emergency the boat operator must be able to respond quickly and communicate his or her situation to relevant authorities. Understanding how to use marine communication procedures is an essential element of responding to emergencies.

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